

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
14 July 2005 (14.07.2005)

PCT

(10) International Publication Number
WO 2005/063694 A1

(51) International Patent Classification⁷: **C07C 255/10**,
255/31, A01N 37/34

(74) Agents: **KAWAMIYA, Osamu** et al.; Aoyama & Partners,
IMP Building, 3-7, Shiromi 1-chome, Chuo-ku, Osaka-shi,
Osaka 5400001 (JP).

(21) International Application Number:
PCT/JP2004/019692

(81) Designated States (*unless otherwise indicated, for every
kind of national protection available*): AE, AG, AL, AM,
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG,
KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG,
MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH,
PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN,
TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(22) International Filing Date:
22 December 2004 (22.12.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
2003-431908 26 December 2003 (26.12.2003) JP
2004-036230 13 February 2004 (13.02.2004) JP
2004-283540 29 September 2004 (29.09.2004) JP

(84) Designated States (*unless otherwise indicated, for every
kind of regional protection available*): ARIPO (BW, GH,
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,
FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO,
SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN,
GQ, GW, ML, MR, NE, SN, TD, TG).

(71) Applicant (*for all designated States except US*): **SUM-
ITOMO CHEMICAL COMPANY, LIMITED** [JP/JP];
27-1, Shinkawa 2-chome, Chuo-ku, Tokyo 1048260 (JP).

(72) Inventors; and

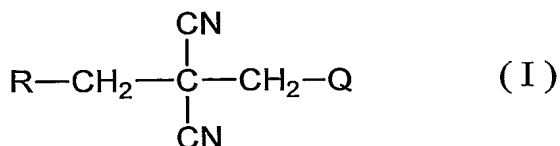
(75) Inventors/Applicants (*for US only*): **OOHIRA,**
Daisuke [JP/JP]; 2-10-3-316, Sonehigashino-cho, Toy-
onaka-shi, Osaka 5610802 (JP). **OTAKA, Ken** [JP/JP];
11-18, Kashima-machi Kubo Aza-sorimachi, Iwaki-shi,
Fukushima 9718144 (JP).

Published:

— with international search report

*For two-letter codes and other abbreviations, refer to the "Guid-
ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.*

(54) Title: NITRILE COMPOUND AND ITS USE IN PEST CONTROL



cycloalkyl optionally substituted with halogen)C1-C4 alkyl, which has excellent control effect against pests.

(57) Abstract: The present invention provides a nitrile compound represented by the formula (I): wherein R represents C1-C4 fluoroalkyl, Q represents halogen, C1-C11 alkyl optionally substituted with halogen, C2-C6 alkenyl group optionally substituted with halogen, C2-C6 alkynyl optionally substituted with halogen, C3-C7 cycloalkyl optionally substituted with halogen or (C3-C7



WO 2005/063694 A1